To: Way, Steven[way.steven@epa.gov]
From: Wall, Dan
Sent: Sun 8/30/2015 2:23:05 PM
Subject: RE: New CC48 loading Analysis

I just saw this. Can you talk now or later today? I will be out of cell range for most of the next week.

-----Original Message-----
From: Way, Steven
Sent: Friday, August 28, 2015 10:36 PM
To: Wall, Dan
Subject: Re: New CC48 loading Analysis

Dan,

It would be good to talk with you about these results and some other questions that have come up.
Let me know your availability. Maybe we could include Craig and Joyel in a call too.

Steve

Sent from my iPad

> On Aug 28, 2015, at 10:05 PM, Wall, Dan <wall.dan@epa.gov> wrote:
>
> Craig,
> This may be the answer you are looking for already completed.... Not sure Steve has seen this yet.
>
>
> -----Original Message-----
> From: Rob Runkel [mailto:runkel@usgs.gov]
> Sent: Thursday, August 27, 2015 12:12 PM
> To: Way, Steven
> Cc: Wall, Dan; Guy, Kerry; Christner, Jan
> Subject: New CC48 loading Analysis
>
>
> All -- If you're in touch w/ Steve, pls let him know about this email; I think he'll want to see it relatively soon.
>
>
> Hi Steve --
>
> As Jan says, its easy to get overwhelmed by all the data.
> I think I've found a way to simplify/summarize pre- vs. post- GKing
> data, or at least some of it. As we discussed the other day, its hard
> to interpret data from A72, due to variations in flow and
> concentration from the upper Animas (A68) and Mineral Creek. So
> focusing on Cement Creek helps. Working w/ the Total, Unfiltered data
> can also be a problem -- its typically pretty noisy, and may not
> reflect some of the effects of treatment (you may have reduced
> dissolved concentrations, but totals are still high due to the fact
> that things don't settle out very fast). So just looking at the
> dissolved data helps (this is especially appropriate for Cement, where
> pH is low and most metals are very soluble).
>
> So I've attached a series of plots, created using Jan's spreadsheet

> ("CC48-CC06 Compared Loads.xlsx", sent to me Tues
> 25 Aug). Each plot has 3 sets of bars:
>
> 1) blue set -- 2009-2014 loads for CC48 during non-runoff periods;
> flows are comparable to August 2015, but generally lower (flows are
> indicated in parens on the x axis).
>
> 2) orange set -- 8/11-18/2015 loads for CC48
>
> 3) green set -- CC48 loads, w/ the measured load from the Gold King
> subtracted out.
>
>
> Summary:
>
> -- Loads are elevated due to the Gold King Discharge
>
> -- Load increases are most pronounced for Cd, Cu, and Pb, consistent
> w/ my previous analyses/comments
>
> -- If you subtract out the Gold King load, you're back to
> 2009-2014 levels
>
>
> Hope this helps - Rob
>
> ---
> Rob Runkel
> Research Hydrologist
> U.S. Geological Survey
> runkel@usgs.gov
> 303.541.3013
> http://profile.usgs.gov/runkel
> ---
> <cc48_dissAl_load.png>
> <cc48_dissCd_load.png>
> <cc48_dissCu_load.png>
> <cc48_dissMn_load.png>
> <cc48_dissPb_load.png>
> <cc48_dissZn_load.png>